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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,094	08/26/2003	Lawrence J. Mann	56319US006	2746
32692	7590	03/23/2006	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			SALVATORE, LYNDIA	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.		Applicant(s)	
	10/648,094		MANN ET AL.	
	Examiner		Art Unit	
	Lynda M. Salvatore		1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 and 38-47 is/are pending in the application.
- 4a) Of the above claim(s) 38-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/26/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-22 drawn to non-woven fibrous web cleaning article, classified in class 442, subclass 417 and Class, 428, subclasses 304.4 and 323.
 - II. Claims 38-47 drawn to method of cleaning a soiled surface classified in class, 134 subclass, 6.
2. The inventions are distinct, each from the other because:

Inventions of Group I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, the product can be used to clean any type of soiled exterior surface such a car or boat.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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5. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.
6. During a telephone conversation with Gregory Allen on March 7th, 2006 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-22. Affirmation of this election must be made by applicant in replying to this Office action. Claims 38-47 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
7. Applicant is advised that the reply to this requirement to complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-6,8-17,19-22 are rejected under 35 U.S.C. 103(a) as obvious over Riedesel, US 2,542,058 in view of McDonell et al., US 5,282,900.

The patent issued to Riedesel teaches a polishing sheet comprising a flexible backing, a binder and resilient particles (column 1, 39-46). Riedesel specifically, teaches coating the backing layer with adhesive binder and pressing the resilient particles into said binder (column 1,

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40-45). With regard to claims 3-4 and 15-16, Riedesel illustrate in figure 2 co-extensively coating the binder onto the surface of the backing material. With specific regard to claims 5 and 17, Riedesel teaches that the fabric backing is filled or impregnated with the binder material (column 4, 20-35). Suitable backing materials include fibrous webs (column 4, 59-66). Suitable resilient particle material includes vulcanized rubber (column 5, 60-65).

Riedesel does not explicitly teach the Shore A hardness range of the rubber particles as set forth in claims 1, 6, 11, and 13, however, it is reasonable to expect that the rubber particles taught by Riedesel would exhibit claimed hardness properties. Support for said presumption is found in the use of like materials such as rubber particles. The burden is upon the Applicant to prove otherwise.

Riedesel also does not explicitly teach the glass transition range as set forth in claims 1, 8-10, 13 and 19-21, however, it is reasonable to expect that the binder materials taught by Riedesel would exhibit claimed glass transition temperature properties. Support for said presumption is found in the use of like materials such as an a binder used to fix rubber particles to the surface of flexible fibrous backing. The burden is upon the Applicant to prove otherwise.

Riedesel fails to teach the claimed three-dimensional non-woven web, however, the patent issued to McDonnell et al., teach a non-woven surface treating article comprising an open lofty non-woven web (abstract). McDonnell et al., teach an entangled web comprising thermoplastic organic fibers (column 10, 19-25). McDonnell et al., teach employing larger denier fibers to produce thick lofty webs. McDonnell et al., specifically teach that thinner webs are more easily loaded with chemical and debris from the surface being treated.

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Therefore, motivated by the desire to provide a thick and lofty cleaning or polishing article, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the polishing sheet of Riedesel with the three-dimensional non-woven web taught by McDonell et al.

With regard to the claimed aspect ratio range of 1:1 to about 2:1 as set forth in claims 12 and 22, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the aspect ratio and particle size to provide the desired frictional and/or abrasive cleaning properties. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233

9. Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as obvious over Riedesel, US 2,542,058 in view of McDonell et al., US 5,282,900 as applied to claims 1 and 13 above and further in view of Hiroyuki, JP 79007996B.

The combination of prior art fails to teach the claimed web density, however, the published Japanese patent abstract discloses a bulky non-woven fabric comprising binder and abrasive particles fixed to the surface. The density of the web is disclosed as ranging from .05-.1 g/cm³.

Therefore, motivated by the desire to provide a cleaning article with a non-woven substrate layer, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the bulky three-dimensional non-woven substrate in the cleaning article taught by the combination of Riedesel in view of McDonell et al., with a suitable density as taught by the published Japanese abstract.

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Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M. Salvatore whose telephone number is 571-272-1482.

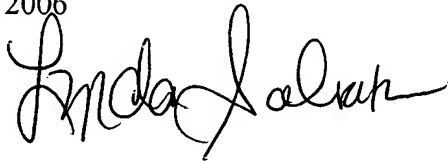
The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 18, 2006

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A handwritten signature in black ink, appearing to read "Lynda Salvatore". The signature is fluid and cursive, with the first name "Lynda" and last name "Salvatore" clearly distinguishable.